

## ABSTRACT

An image reading device includes a photoelectric device provided with an empty transfer part. An A-D converter performs A-D conversion on an output signal for each pixel of the photoelectric device. A reference voltage varying part varies a reference voltage of the A-D converter. A detecting part detects a black correction reference data output from each pixel of the photoelectric device. A black shading correcting part subtracts the black correction reference data from digital image data obtained from the output signal for each pixel of the photoelectric device when an image is read by the A-D converter having the reference voltage set therein. And, a correcting part corrects the black correction reference data by a ratio of an output level of the empty transfer part obtained through the A-D converter when the black correction reference data is detected and an output level of the empty transfer part obtained through the A-D converter when the image is read.